

**TEACHING READING COMPREHENSION ON DESCRIPTIVE TEXT
BY USING MACROMEDIA FLASH**

AN ARTICLE

By

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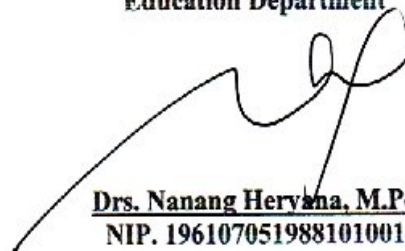
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TEACHING READING COMPREHENSION ON DESCRIPTIVE TEXT BY USING MACROMEDIA FLASH

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Abstract: The purpose of this research is to know whether the change of students' achievement in reading comprehension before and after treatment by using Macromedia Flash on descriptive text to the seventh grade students of SMP Negeri 3 Pontianak in academic year 2011/2012 significant? This research used quasi-experimental design which the writer conducted two groups; experimental group and control group. The treatments were given three times. The data result showed that the interval mean score of the experimental group in pre-test and post-test was 11.39, while control group was 1.45. The t-test was higher than t-table, it means that Alternative Hypothesis "There is a significant change of the students' achievement in reading comprehension on descriptive text after being taught by using Macromedia Flash" was accepted.

Keywords: Reading comprehension, descriptive text, Macromedia Flash

Abstrak: Tujuan penelitian ini adalah untuk mengetahui perubahan prestasi siswa dalam pemahaman membaca sebelum dan setelah perlakuan dengan menggunakan Macromedia Flash untuk teks deskriptif pada siswa kelas tujuh SMP Negeri 3 Pontianak pada tahun ajaran 2011/2012 signifikan? Penelitian ini menggunakan bentuk eksperimen semu yang telah penulis selenggarakan dalam dua kelompok; kelompok eksperimen dan kelompok kontrol. Perlakuan telah diberikan sebanyak tiga kali. Hasil data menunjukkan bahwa selisih nilai rata-rata kelompok eksperimen untuk *pre-test* dan *post-test* adalah 11,39, sedangkan kelompok kontrol yaitu 1,45. Nilai t-tes lebih tinggi dari t-tabel yang artinya adalah Hipotesa alternatif yaitu "Ada sebuah perubahan yang signifikan untuk prestasi siswa dalam pemahaman membaca teks deskriptif setelah mengajar menggunakan Macromedia Flash" diterima.

Kata kunci: Pemahaman membaca, teks deskriptif, Macromedia Flash

In the concept of KTSP, teacher is not the only learning source as students can learn from technological media like television, interactive compact disk, or computer. The students can get informations by themselves without the teacher. Teacher's role in this context is more as a facilitator, a mediator, an organizer, and

an evaluator that has ability to manage the class in order to give the students amenity to learn. Because the concept is not teacher-based, the teacher has to be able to use the teaching media given to support teaching learning process. Nowadays, every school already has its own teaching media and the familiar media used is multimedia. According to Brooks (in Doolittle and Tech, 2011:1) “Multimedia is the combined use of several media, such as movies, slides, music, and lighting, especially for the purpose of education or entertainment”. Moreover, Maddux, et al (in Doolittle and Tech, 2011:1) tell “Multimedia comprises a computer program that includes text along with at least one of the following: audio or sophisticated sound, music, video, photographs, 3-D graphics, animation, or high-resolution graphics”. Dharma (2008:37) tells the use of media (or multimedia) can help teacher in teaching because no need for teacher to talk much, time-saving, teacher’s explanation helped by the media so that the students can understand easier, the teaching learning process will be interesting, and motivate students to learn.

Sadiman et al (2009:35) said that media is mediator or conductor to send information from the sender to the receiver. Moreover, Raharjo (cited in Fitria, 2005:22) state that media is place of information which is want to deliver by the sender to the target or receiver. According to Hamalik (in Arsyad, 2009:12) teaching media is a tool, method, and technique which is use for streamline the communication and interaction between teacher and students in teaching and learning process in the school. In general, teaching media is useful to solve some difficulties, they are: communication difficulties, classroom restrictiveness, the passive students, and the students monitoring differences. Kemp and Dayton (in Arsyad, 2009:28) state functions of teaching media are: to motivate; to provide information; and to give instruction. Dharma (2008:11) states that teaching media can be choose by ACTION (Access, Cost, Technology, Interactivity, Organization, and Novelty).

According to Sanjaya (2008) teaching media can be classified based on characteristics and range. Based on its characteristics, teaching media is classified as follow: (1) audio media: only has sounds element, like radio and voice record; (2) visual media: only has visual element, like model, slide film, photo, and picture and (3) audio-visual media: have both elements of audio and visual like video record and film. People belief this media is better than two media before because has both two elements. Based on its range, teaching media is classified as follow: (1) projection media like film. This kind of media needs projector tools to operate; (2) media which is not projected like picture, photo, painting, and radio.

According to the information from the English teacher in SMP Negeri 3 Pontianak, the researcher knew that reading still becomes a difficult activity for some students. They often face difficulties in answering the questions given, such as about the grasping main idea of the text and drawing conclusion, they do not also understand about the text because the lack of vocabulary and they think that reading activity is boring activity.

Reading comprehension is understanding what a text is all about. It is more than just understanding words in isolation. It is putting them together and using prior knowledge to develop meaning. McNamara (2007:111) states that

reading comprehension is the ability to go beyond the words to understand the ideas and the relationships between ideas conveyed in text. Pang et al (2003:14) said that comprehension is an active process in the construction of meaning.

Smith (in Westwood, 2001:21-22) divides four levels of comprehension, they are: (a) Literal level. At the literal level the basic facts are understood. This information is contained explicitly within the text. (b) Inferential level. At the inferential level the reader is able to go beyond what is written on the page and add meaning or draw conclusions. (c) Critical level. At the critical level the reader assesses the good sense of what he or she is reading, its clarity, accuracy and any apparent exaggeration or bias. (d) Creative level. At the creative level the reader can take information or ideas from what has been read and develop new ideas from them. The creative level stimulates the reader to new and original thinking.

The researcher used descriptivetext in teaching reading comprehension. Descriptive text is a text which says what a person or a thing is like. Its purpose is to describe and reveal a particular person, place, or thing. The goal of the descriptive text is transferring the experience of the writers. The experience can be what they see, read, or feel. Descriptive text commonly tries to reveal the image of certain person, place, animal, or thing. Descriptive text has structure as: (1) Identification: identifying the phenomenon to be described. (2) Description: describing the phenomenon in parts, qualities, or/and characteristics. The language features of descriptive text: (1) Specific participants. Example: Bandengan Beach, My House, Borobudur Temple, Uncle Joko. (2) The use of adjective. Example: a beautiful beach, a handsome man, the famous place in Jepara. (3) The use of simple present tense. Example: He walks with pride and grace, performing a dance of disdain as he slowly lifts and lowers each paw with the delicacy of a ballet dancer. (4) Action verbs. Example: run, sleep, walk, cut.

There are four aspects analysis must be considered in reading comprehension a descriptive text, they are: (1) Identification of Main Idea. A paragraph is a group of sentences related to a particular topic, or central theme. Every paragraph has a key concept or main idea. The main idea is the most important piece of information the author wants the readersto know about the concept of that paragraph. When authors write they have an idea in mind that they are trying to get across. This is especially true as authors compose paragraphs. An author organizes each paragraph's main idea and supporting details to support the topic or central theme, and each paragraph supports the paragraph preceding it. The topic sentence announces the general theme (or portion of the theme) to be dealt with in the paragraph. Although the topic sentence may appear anywhere in the paragraph, it is usually stated at the beginning of the paragraph. This sentence provides the focus for the writer while writing and for the readers while reading. The first thing the readers must be able to do to get at the main idea of a paragraph is to identify the topic or the subject of the paragraph. (2) Understanding Details. To get the specific or detail ideas of reading text, the students may seem to scan the text till they get what they are searching. Knowing what we want to know and knowing how deeply to study the material can minimize the time-consumed during the reading process. (3) Vocabulary in Context. In order to read words the readers must first know them. Imagine how frustrating it would be to read the text

if all of the words were unfamiliar to the readers. Knowing the meanings of words on the text is essential for reading comprehension. The role that vocabulary plays in reading is often ignored or overlooked in reading education. A strong vocabulary is one of the pillars of reading comprehension. Vocabulary is inextricably linked to comprehension. The readers can not comprehend a text if they do not understand the words being used in it. (4) Inferencing. Inference is the act or process of deriving logical conclusions from premises known or assumed to be true. McNamara (2007:49) stated that "Inference-making is essential to ensure good understanding of a text". The writer does not necessarily state every little detail that would result in text that was lengthy and possibly boring. Instead, the readers is left to fill in details that are not explicitly stated in the text, either by integrating statements within the text or by incorporating general knowledge with textual information.

To solve the students' problem in reading comprehension, it is important to use an interesting teaching media that motivates students to learn, one of them is by using multimedia. Nowadays, there are so many software which can be used to make teaching media in form of multimedia, one of them is Macromedia Flash. Macromedia Flash is a drawing application which developed into an animation program for the internet. Flash developed by Jonathan Gay and his company Future Splash in the early 1990s. Hosea (2006:2) tells that flash is used for the creation of graphics, animation and media that users can interact with. Pramono (2006) states macromedia flash is animation software that uses to deliver an abstract concept and it is operated by computer and image projector. Flash projects can include simple animations, video content, complex presentations, applications, and everything in between.

Mayer and Anderson (1992:444) state that connections in multimedia situations involving words and pictures. Connection 1 involves building representational connections between verbal information that is presented and the learner's verbal representation of that information. Connection 2 involves building representational connections between pictorial information that is presented and the learner's visual representation of that information. Connection 3 involves building referential connections between corresponding elements in the learner's verbal and visual representations.

Mayer (1997:10) explained five major principles of how to use multimedia to help students understand a scientific explanation. (1) Multiple Representation Principle: It is better to present an explanation in words and pictures than solely in words. The first principle is simply that it is better to present an explanation using two modes of representation rather than one. (2) Contiguity Principle: When giving a multimedia explanation, present corresponding words and pictures contiguously rather than separately. The second principle is that students better understand an explanation when corresponding words and pictures are presented at the same time than when they are separated in time. (3) Split-Attention Principle: When giving a multimedia explanation, present words as auditory narration rather than as visual on-screen text. The third principle is that words should be presented auditorily rather than visually. (4) The fourth principle is that multimedia effect, contiguity effects, and split-attention effects depend on

individual differences in the learner. (5) Coherence Principal: When giving a multimedia explanation, use few rather than many extraneous words and pictures. The fifth principle is that students learn better from a coherent summary which highlights the relevant words and pictures than from a longer version of the summary.

METHOD

In this research, the researcher uses quasi-experimental method. Quasi-experimental research typically involves applied settings where it is not possible to control all relevant variables but only some of them. There are two groups in this method: experimental group and control group. The design of this method is as follow:

Table 1. Quasi-experimental design

Subject	Pre-test	Treatment	Post-test
Experimental Class	0 ₁	X	0 ₂
Control Class	0 ₁	-	0 ₂

In the experimental group, the design starts by giving the students pre-test. After the pre-test, the design continued by treatment and ended with a post-test. For the control group, the students receive the pre-test and post-test as well as the experimental group. But this group does not receive a treatment after the pre-test.

The population of this research includes all the seventh grade students of SMP Negeri 3 Pontianak in Academic year 2011/2012 which consists of 193 students. In this research the sample is taken by purposive sampling. Purposive sampling is selecting sample because of some characteristics and characteristics chose by the researcher are the score of students in class VII E and VII F was slightly different and they had the lowest mean score than other classes. The researcher chose Class VII F as the experimental group that consists of 24 students. Meanwhile, class VII E is chosen as control group that consists of 24 students as well.

This research uses the measurement technique to measure how the students reading comprehension on descriptive text after being taught by using Macromedia Flash. The test will administered twice for both experimental and control group. The first is pretest, which is given to investigate the students' achievement before the treatment is given. The second is posttest which is given to investigate the students' achievement after the treatment is given. Thus, the results of both tests will compared to know its interval that is used to investigate whether the achievement is significant or not.

The tool of collecting data in this research is a multiple choice test of 30 questions. The researcher applies the same test both for pretest and posttest to the experimental and control groups. To know the content validity of the test, the researcher constructs the table of specification.

Table 2. Table of specification

Level of Comprehension	Subject Matter	Number of test item
Literal	Details of information	1, 2, 14, 22, 25, 26, 27 (7)

	Vocabulary	3, 13, 15, 16, 23, 29 (6)
	Generic structure of the text	28 (1)
Inferential	Inference	4, 6, 7, 8, 12, 19, 20 (7)
	Main idea	5, 10, 11, 18, 21, 30 (6)
	The purpose of the text	17 (1)
	The language features of the text	24 (1)
TOTAL		30

The test items analysis is necessary to obtain the difficulty level and the discriminating power of the test items. The formula of level difficulty is
$$= \frac{RU + RL}{N}$$
, where RU was for the number of upper group correct answer, RL was for the number of lower group's correct answer, and N was for the total number of students in upper group and the lower group. The formula of discriminating power is
$$= \frac{RU - RL}{N}$$
, where was the total number of upper group's correct answer, and

was for the total number of lower group's correct answer. Realibility refers to the consistency or dependability of a measurement technique and it is concerned with the consistency or stability of the score obtained from a measure or assessment over time and across settings or conditions (Marczyk, DeMatteo & Festinger, 2005:103). The coefficient reliability of scores is calculated by using the Kuder Richardson 21. The formula is as follows:
$$KR_{21} = \left(\frac{K}{K-1} \right) \left(1 - \frac{M(K-M)}{K(SD)^2} \right)$$
,

$$SD = \sqrt{\frac{\sum X^2 - \left[\frac{(\sum X)^2}{N} \right]}{N}}$$
 Where: was Kuder Richardson reliability coefficient, was for number of items in the test, was for mean score in the test, was for the standard deviation of the test score, \sum was for the total sum of the squared score, \sum was for the total sum of the score, and was for the number of students who take the test

RESEARCH FINDINGS AND DISCUSSION

The total of students' pre-test score in experimental group was 1896.67. Thus, the mean score was 79.03. It was considered "average to good". Meanwhile, the total of students' post-test score in experimental group was 2170.03. Therefore, the mean score was 90.42. It was considered "good to excellent". The result of mean score of post-test was significant than in the pre-test. The interval of the students' mean score in experimental group was 11.39. The standard deviation of the experimental group was $= \sqrt{30.49} = 5.52$. It showed that the standard deviation of the students' score from the mean score is 5.52.

Table 3. The Result of the Students' Pre-test and Post-test Score in Experimental Group.

No	Students' Initial	Pre-test (X _{1a})	Post-test (X _{1b})	Interval (X ₁)	Interval (X ₁ ²)	Squared
1	DA	73,33	90,00	16,67	277,89	
2	DK	86,67	90,00	3,33	11,09	
3	DP	73,33	86,67	13,34	177,96	
4	DFAP	63,33	86,67	23,34	544,76	
5	DPS	76,67	90,00	13,33	177,69	
6	DL	73,33	83,33	10,00	100,00	
7	EAP	76,67	90,00	13,33	177,69	
8	ELP	80,00	86,67	6,67	44,49	
9	FNY	76,67	86,67	10,00	100,00	
10	FA	83,33	93,33	10,00	100,00	
11	FNF	90,00	96,67	6,67	44,49	
12	FPN	90,00	96,67	6,67	44,49	
13	FDH	86,67	90,00	3,33	11,09	
14	FM	86,67	93,33	6,66	44,36	
15	FF	83,33	90,00	6,67	44,49	
16	FTN	60,00	80,00	20,00	400,00	
17	FQA	76,67	96,67	20,00	400,00	
18	FRA	83,33	100,00	16,67	277,89	
19	FSF	90,00	96,67	6,67	44,49	
20	FSP	76,67	86,67	10,00	100,00	
21	FRP	83,33	90,00	6,67	44,49	
22	FT	83,33	96,67	13,34	177,96	
23	GE	86,67	96,67	10,00	100,00	
24	ISJ	56,67	76,67	20,00	400,00	
Total		1896,67	2170,03	273,36	3845,32	
Mean score		79,03	90,42			

The total of students' pre-test score in control group was 1893.34. Thus, the mean score was 82.32. It was considered "good to excellent". Meanwhile, the total of students' post-test score in control group was 83.77. It was considered "good to excellent". The interval of the students' mean score in control group was 1.45. The standard deviation of the control group was $= \sqrt{13.36} = 3.66$. It showed that the standard deviation of the students' score from the mean score is 3.66.

Table 4. The Result of the Students' Pre-test and Post-test Score in Control

Group.

No	Students' Initial	Pre-test (X _{2a})	Post-test (X _{2b})	Interval (X ₂)	Interval (X ₂ ²)	Squared
1	GSUP	83,33	83,33	0,00	0,00	
2	GA	63,33	76,67	13,34	177,96	
3	GMF	90,00	93,33	3,33	11,09	
4	HH	86,67	93,33	6,66	44,36	
5	HK	80,00	83,33	3,33	11,09	
6	HA	70,00	66,67	-3,33	11,09	
7	HN	76,67	76,67	0,00	0,00	
8	IS	90,00	90,00	0,00	0,00	
9	IR	90,00	90,00	0,00	0,00	
10	ICC	80,00	80,00	0,00	0,00	
11	IYS	90,00	90,00	0,00	0,00	
12	IKL	76,67	76,67	0,00	0,00	
13	IAS	80,00	80,00	0,00	0,00	
14	IDL	70,00	73,33	3,33	11,09	
15	IFW	83,33	83,33	0,00	0,00	
16	IAS	100,00	100,00	0,00	0,00	
17	IH	93,33	93,33	0,00	0,00	
18	INA	70,00	73,33	3,33	11,09	
19	JYM	90,00	90,00	0,00	0,00	
20	KU	86,67	90,00	3,33	11,09	
21	KHM	80,00	83,33	3,33	11,09	
22	SZI	76,67	80,00	3,33	11,09	
23	SF	86,67	80,00	-6,67	44,49	
Total		1893,34	1926,65	33,31	355,52	
Mean score		82,32	83,77			

Based on the result of the data computation, it was obtained that the t-test score (7.47) was higher than t-table (2.021) at 0.05 the degree of freedom (df)= + -2 (24+23-2=45). This could prove that teaching reading comprehension on descriptive text by using Macromedia Flash was an effective way to increase the students' ability to comprehend the material, especially the reading comprehension on descriptive texts. Therefore, the Alternative Hypothesis (Ha) "There is a significant change of the students' achievement in reading comprehension on descriptive text after being taught by using Macromedia Flash." was accepted. Therefore, it can be concluded that the difference between

the experimental group and the control group was significant. Effect size of the treatment was 1.82, categorized as high. To measure effect size, the researcher used the formula $ES = \frac{\bar{X}_E - \bar{X}_C}{s_C}$, where \bar{X}_E was mean score of post-test in experimental group, \bar{X}_C was for mean score of post-test in control group, and s_C was for the standard deviation of control group students' score.

The researcher took class VII F as the experimental group. The students did the test of 30 multiple choices questions in 80 minutes. In the next three meetings, the researcher taught descriptive text to the students using Macromedia Flash, helped with laptop and media projector. The descriptive text printed out for the students, and the researcher explained the text in form of multimedia, created by using Macromedia Flash. In every treatment, the teacher gave the test in the end of teaching to see the students understanding of the material.

Text designed to be easy to read and the font size varies appropriately, it made the students clear to see the text. Animation given helped the students guessed the meaning of some words they did not understand, so that they did not need to consult their dictionary. Movable text and animation made the students focus on them. It helped by the background which makes the text easy to read. The background did not use strong color. Explanation in words and pictures/animation was better than solely in words only to help students understand a specific explanation. The word and animation were presented at the same time made the students better understand the explanation than separated in time, for example, when the sentence "the sun shines brightly" presented, the animation about the sun shines brightly also presented at the same time. The words and animation followed by the audio also made the students better understand the explanation and helped the students to memorize the information. For example, when the sentence and animation "the rainwater dropped" presented, the audio saying the text was also played and the animation provided with sound of rain at the same time. The students learn better from a coherent summary which highlight the relevant words and pictures than from a longer version of the summary, it was why in Macromedia Flash the words and animation made as short as possible, but highlight the information. For example, the print out text was a long text, but in multimedia, it used only the key point of information in the text.

Although Macromedia Flash was succeeded to make students understood the explanation, there are some considerations need to be consider by the teacher. While the treatments, the students found some difficult words in the text. The students cannot consult their dictionary. All they have to do was guessing the meaning from the media given. The teacher helped the students to find the meaning of the words by lead them to guess the meaning from the media. Since the students were enthusiastic in learning, it will make them noisy so the teacher has to know how to manage them. The teacher should also consider the ability of students in getting the information, not all students are good comprehenders so the teacher may play the media more than once.

The researcher took class VII E as the control group. The pretest was held in 80 minutes with 23 students. The researcher did not give treatment for the control group. After the treatment given, the researcher held a post-test for the

experimental and control groups. The purpose of post-test was to see the students' achievement after the treatments. The researcher has analyzed the result by calculating the mean score of pre-test and post-test of experimental and control groups. Furthermore, the researcher calculated the standard deviation squared of each group. Therefore, from the result of computation, it was found that the mean score of posttest in experimental group was higher than the mean score of post-test in control group ($90.42 > 83.77$). Moreover, the interval of the students' mean score in experimental group was higher than control group ($11.39 > 1.45$). The result of Effect Size was 1.82 (categorized as "high"). The t-value was higher than t-table ($7.47 > 2.021$). It indicated the Null Hypothesis (H_0) was rejected and Alternative Hypothesis (H_a) was accepted.

CONCLUSION AND RECOMMENDATION

Conclusion

Teaching by using Macromedia Flash was helpful to improve students' reading comprehension. It was indicated by the improvement of students' mean score in the post-test. The students' mean score before treatment was 79.03 and after treatment was 90.42. the result of t-value was 7.47 which higher than t-table for $df=43$ that was 2.021.

Recommendation

It is good for the English teacher to apply Macromedia Flash in teaching reading comprehension since the media created by using Macromedia Flash can make the students enthusiastic in learning English. By using Macromedia Flash, it is not used for figuring out the meaning of a word, but it requires the students' understanding about the meaning of a word from the media given. The students will be able to find the meaning of words without consulting their dictionary. Macromedia Flash can motivate students to learn because has both audio and visual elements and also make the students memorize the information better. Teaching learning English must be fun, enjoyable, and entertaining for both teacher and students. Teaching reading comprehension should use interesting, amusing, and entertaining material to attract the students in teaching learning process.

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